

JUL 15 2001  
12/06/01  
U.S. PRO

DOCKET NO.: RTS-0348

Date of Deposit: 11/30/2001

BOX  
Sieg

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



re application of: C. Frank Bennett and Susan M. Freier

Antisense Modulation of Phosphatidylinositol-4-phosphate  
5'-kinase, I $\alpha$  Expression

BOX SEQUENCE

Assistant Commissioner for Patents  
Washington DC 20231

DATE OF DEPOSIT: 11/30/01  
I HEREBY CERTIFY THAT THIS PAPER IS  
BEING DEPOSITED WITH THE UNITED  
STATES POSTAL SERVICE AS FIRST CLASS  
MAIL ON THE DATE INDICATED, AND IS ADDRESSED TO  
THE ASSISTANT COMMISSIONER FOR  
PATENTS, WASHINGTON, DC 20231.

*Donna T. Ward*  
Signature  
TELEPHONE: (202) 708-3541  
REGISTRATION NO.: 48,271

PATENT APPLICATION TRANSMITTAL LETTER

Transmitted herewith for filing, please find the following:

- The specification of the above-referenced patent application;
- An executed Declaration or Oath and Power of Attorney;
- An Assignment of the invention to **Isis Pharmaceuticals Inc.** with recordation cover sheet (PTO Form PTO-1595) and \$40.00 cover fee;
- Statement to Support Filing and Submission of DNA/Amino Acid Sequences in Accordance with 37 CFR § 1.821 through 1.825;
- Sequence listing in computer readable form in accordance with 37 C.F.R. § 1.821(e);
- An Information Disclosure Statement with references; and
- Applicant claims small entity status pursuant to 37 CFR § 1.27; and
- Statement of attempt to deposit correspondence with the USPS via Express Mail.

The filing fee has been calculated as shown below:

For:	No. Filed	No. Extra	Rate	Fee
BASE FEE				
Total Claims	20 - 20 =	0	x \$9=	\$0
Indep. Claims	2 - 3 =	0	x \$40=	\$0
			TOTAL	\$ 370.00

The Commissioner is hereby authorized to charge the following fees to Deposit Account No. 500252:

- the amount of \$410.00 for the above listed fees;
- payment of the following fees associated with this communication or credit any overpayment;
- any additional filing fees required under 37 CFR 1.16 including fees for presentation of extra claims; and
- any additional patent application processing fees under 37 CFR 1.17 and under 37 CFR 1.20 (d).

Triple copy of this transmittal are enclosed.

Date: November 30, 2001

*Donna T. Ward*  
Donna T. Ward  
Registration No. 48,271  
Isis Pharmaceuticals, Inc.

Please address all correspondence to:  
Jane Massey Licata or Kathleen A. Tyrrell  
Licata & Tyrrell, P.C.  
66 East Main Street  
Marlton NJ 08053  
(856) 810-1515

DOCKET NO.: RTS-0348

Date of Deposit: 11/20/2001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): C. Frank Bennett and Susan M. Freier

Serial No.: not yet assigned Filing Date: herewith

Title: Antisense Modulation of Phosphatidylinositol-4-phosphate 5-kinase,  
Its Expression

BOX SEQUENCE

Assistant Commissioner for Patents  
Washington, D.C., 20231

STATEMENT TO SUPPORT FILING AND SUBMISSION IN ACCORDANCE WITH 37 C.F.R. §§  
1.821 THROUGH 1.825

I hereby state, in accordance with the requirements of 37 C.F.R.  
§1.821(f), that the contents of the paper and computer readable copies of  
the Sequence Listing, submitted in accordance with 37 C.F.R. §1.821(c) and  
(e), respectively, are the same.

Date: November 30, 2001

Respectfully submitted,

  
Donna T. Ward  
Registration No. 48,271  
Isis Pharmaceuticals, Inc.

Please address all correspondence to:

Licata & Tyrrell, P.C.  
66 East Main Street  
Marlton NJ 08053  
(856) 810-1515

TOS021-11550007